

U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2008-111EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER:

COC70444: Ace Draw Federal Well #33-24
COC73549: Access road Right-of-Way
COC73550: Pipeline Right-of-Way

PROJECT NAME: Ace Draw Federal Well #33-24

LEGAL DESCRIPTION: NWSE Sec. 24, T12N, R97W, 6th P. M.

APPLICANT: J-W Operating Company

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.

Remarks: The proposed Ace Draw Federal Well # 33-24, access road, and pipeline would be located within Management Unit 2 (Little Snake Resource Management Plan). One of the objectives of Management Unit 2 is to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas, and forest resources.

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: To provide for the development of oil and gas resources and to supply energy resources to the American public.

PUBLIC SCOPING PROCESS: The Notice of Staking (NOS) has been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning September 9,

2008 when the NOS was received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

DESCRIPTION OF PROPOSED ACTION: The proposed action is to approve one Application for Permit to Drill (APD) submitted by J-W Operating Company, a Right-of-Way for the associated access road, and a Right-of-Way for the associated pipeline. J-W Operating Company proposes to drill one gas well on BLM administered land located near Powder Wash, CO in the NWSE Sec. 24, T12N, R97W. An APD has been filed with the LSFO for the Ace Draw Federal Well #33-24. The APD include drilling and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by J-W Operating Company in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to an approved APD.

The proposed well would be located approximately 43 miles west of Baggs, WY. Construction work is planned to start during the summer of 2009 and the estimated duration of construction and drilling of the well would be 15 days. 2,611 feet of new access road would be constructed for the well resulting in new surface disturbance of 3.0 acres. The existing access road would be off lease and would require a federal Right-of-Way for 10,685 feet in length and 30 foot in width.

The proposed well pad would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 2.5 acres would be disturbed for construction of the well pad. This would include the 255' by 385' well pad, the topsoil, and subsoil piles. A reserve pit would be constructed on the well pad to hold drill mud and cuttings. If a well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be stabilized and re-vegetated. If a gas well proves unproductive, it would be properly plugged and the entire well pad and access road would be reclaimed.

J-W Operating Company did include plans for a gas sales pipeline with the APD. Approximately 5,251 feet of new pipeline would be installed on federal surface and connected to existing gas pipeline in Sec. 30, T12N, R97W to service the well once production is established. Total surface disturbance associated with pipeline construction would be 3.6 acres.

Total surface disturbance for the proposed action would be 9.1 acres.

NO ACTION ALTERNATIVE: The "no action" alternative is that the well would not be permitted and therefore no well would be drilled. J-W Operating Company holds a valid and current oil and gas lease for the area where the proposed Ace Draw Federal Well #33-24 would be located. Under leasing contracts, the BLM has an obligation to allow mineral development if the environmental consequences are not irreversible or too severe. The APD process is designed to overcome the no action situation of not accepting the APDs through the mitigation of predicted environmental consequences. The proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, the no action alternative will not be analyzed further in this EA.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide. The proposed action would not adversely affect the regional air quality.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 12/01/08

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 12/01/08

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project(s), J.W. Operating Company Ace Draw Federal 33-25-12-97, has undergone a Class III cultural resource survey:

Survey ID:	MF.LM.R651
Title:	CLASS III CULTURAL RESOURCE INVENTORY FOR THE J-W OPERATING COMPANY ACE DRAW FEDERAL #33-24-12-97 WELL PAD AND ACCESS ROAD MOFFAT COUNTY, COLORADO (06-WAS-169)
Author:	DARLINGTON, DAVID
Date:	04/07/2006
Contractor:	WESTERN ARCHAEOLOGICAL SERVICES FOR THE BLM CRAIG FIELD OFFICE
Survey ID:	MF.LM.R384
Title:	CLASS III CULTURAL RESOURCE INVENTORY FOR THE ACE DRAW #4-24 WELL LOCATION, ACCESS & PIPELINE LOCATED IN THE SW NW SECTION 24, T12N, R97W MOFFAT COUNTY, COLORADO (BLM CO-100-LS-00-51)
Author:	HATCHER, JULIE
Date:	
Contractor:	PROMGHORN ARCHAEOLOGY FOR THE BLM LITTLE SNAKE FIELD OFFICE
Survey ID:	MF.LM.R398
Title:	CLASS III CULTURAL RESOURCE INVENTORY FOR THE ACE DRAW #4-24 ALTERNATE ACCESS LOCATED IN SWEETWATER COUNTY, WYOMING AND MOFFAT COUNTY, COLORADO (CO 100 LS 00-051)
Author:	HATCHER, JULIE
Date:	10/01/2000
Contractor:	PRONGHORN ARCHAEOLOGY FOR THE BLM LITTLE SNAKE FIELD OFFICE

The survey identified one eligible to the National Register of Historic Places cultural resource (5MF4927). The proposed project may proceed as described with the following mitigative measures in place.

Mitigative Measures: All road maintenance activities must avoid 5MF4927. There must be no vertical or horizontal disturbance within the area. If horizontal or vertical disturbance is expected, the operator must notify the Authorized officer (AO). At that time, the effect would be determined and appropriate mitigation must be determined. At that time, the State Historic Preservation Office must be consulted. The company would be responsible for mitigation of the cultural resource.

The following standard stipulations apply for this project:

1. The operator would be responsible for informing all persons who are associated with the operations that they would be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO would inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator would likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO would assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator would be responsible for mitigation costs. The AO would provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator would then be allowed to resume construction.

Name of specialist and date: Robyn Watkins Morris 01/21/09

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action would be located in an area of isolated dwellings. Ranching, farming and oil/gas development are the primary economic activities.

Environmental Consequences: The project area would be relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of the proposed action. The proposed action would not affect the social, cultural or economic well-being and health of Native Americans, minority or low-income populations.

Mitigative Measures: None.

Name of specialist and date: Mike Andrews 12/08/08

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones would be avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property would result from the proposed action.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 12/01/08

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Downy brome (cheatgrass), yellow alyssum, blue mustard and other annual weeds are common along roadsides and on other disturbed areas. Canada thistle and several species of biennial thistles are known to occur in this area. Halogeton, Russian knapweed and hoary cress (whiteweed) are present in the vicinity of this proposed project. Other species of noxious weeds are not known to be a problem in this area, but they can always be introduced by vehicle traffic, livestock and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling the well, constructing the access road, installing the pipeline and other subsequent activities would create an environment and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles and equipment brought onto the site can introduce weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (yellow alyssum, blue mustard and other annual weeds) occur on adjacent rangelands and would occupy the disturbed areas; the bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and can affect the establishment of seeded plant species. Halogeton is a noxious annual weed that would also occupy the disturbed areas, but this weed species would likely require intensive control with herbicides to prevent it from moving into adjacent rangelands. Establishment of perennial grasses and other seeded plants would be expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts have failed.

The perennial and biennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales or areas along the road that would collect additional water. The largest concern in the project area would

be for these species to become established and not be detected, providing seed which can be moved onto adjacent rangelands. The operator would be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well.

Mitigation attached as Conditions of Approval to minimize disturbance and obtain successful reclamation of the disturbed areas, as well as weed control utilizing integrated practices, including herbicide applications would help to control the noxious weed species. All principles of Integrated Pest Management should be employed to control noxious and invasive weeds on public lands.

Mitigative Measures: None.

Name of specialist and date: Ole Olsen 12/05/08

MIGRATORY BIRDS

Affected Environment: The proposed pipeline for this well is within 1 mile of a known ferruginous hawk nest site. Ferruginous hawks are listed on the USFWS 2002 Birds of Conservation Concern List. The nest site was occupied during the 2008 nesting season. The proposed action would be located in excess of 1 mile from the nest site.

Environmental Consequences: Construction and drilling activities associated with well development would not likely impact nesting ferruginous hawks due to topographic barriers and distance between the nest site and well pad. The construction of the pipeline associated with this well could have an impact on nesting ferruginous hawks. Installation of the pipeline should not be conducted during the nesting season in order to prevent impacts.

Mitigative Measures: CO-18 No surface disturbing activities would be conducted between February 1 and August 15th in order to protect nesting ferruginous hawks. An exception to this timing restriction can be granted if the nest site is not active after May 15th. **This timing restriction only applies to the construction and installation of the pipeline associated with this well. There is no timing restriction for the access road and well.**

Name of specialist and date: Timothy Novotny 12/02/08

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A follow-up phone call was performed on June 16, 2008. No comments were received (letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris 01/21/08

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 12/01/08

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species or habitats for such species within the proposed project area. The project area does provide suitable habitat for greater sage-grouse, a BLM special status species. The project area is dominated by low growing sagebrush and is unlikely to support nesting sage-grouse. The area is most likely used by sage grouse during winter months.

Environmental Consequences: The construction and drilling of the proposed well would not impact any threatened or endangered species or their habitats. Construction or drilling during winter months could have a negative impact on grouse by displacing them into other areas.

Mitigative Measures: CO-15 No surface disturbing activities between December 16 and March 15 in order to protect wintering greater sage-grouse.

Name of specialist and date: Timothy Novotny 12/02/08

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed well.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim 12/03/08

WASTES, HAZARDOUS OR SOLID

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment.

Environmental Consequences: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 12/01/08

WATER QUALITY – GROUND

Affected Environment: Fresh water within the Tertiary Wasatch Formation may occur. The surface casing would be adequate to protect any fresh water zones within 1,100 feet of the surface, coupled with production casing and cement behind pipe from TD to approximately 3,500' depth. This would leave an open annular space from 1,100' to 3,500', from the Wasatch Formation to the Lewis Formation and through the Wasatch-Fort Union aquifer. Waters within porous zones in these formations are of similar quality and can be allowed to commingle.

Environmental Consequences: With the use of proper construction practices, drilling practices, and with best management practices no significant adverse impact to groundwater aquifers and quality would be anticipated to result from the proposed action. A geologic and engineering review was performed on the 8-point drilling plan to ensure that the cementing and casing programs adequately protect the downhole resources.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo 12/10/08

WATER QUALITY/HYDROLOGY – SURFACE

Affected Environment: The proposed well would be constructed near Powder Wash, an ephemeral drainage. Any runoff from the well pad, pipeline, or access road would drain into Powder Wash. All stream segments near the well pad location are presently supporting classified beneficial uses. No impaired stream segments occur in the vicinity of the proposed action.

Environmental Consequences: Runoff water from the well site would drain towards Powder Wash, which is an ephemeral tributary to the Little Snake River. Increased

sedimentation to Powder Wash during spring runoff or from high intensity rainstorms would be the most likely environmental consequence from the proposed action. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval would reduce the potential impacts caused by surface runoff.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 12/03/08

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian zones within the project area.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny 12/02/08

WILD & SCENIC RIVERS

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Gina Robison 12/02/08

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Gina Robison 12/02/08

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: The proposed action would be in favorability zone 4 (highest for oil and gas potential). This well would penetrate the Wasatch, Fort Union, Lance, Lewis Shale, and Almond Formation of the Mesaverde Group. Bituminous coal beds and stringers are found throughout the Wasatch (Tschudy, 1971), Fort Union, Lewis Shale, and Mesaverde Formations. These thin coal seams have little mineable value and little value for the production of coal bed methane (CBM) as their total gas content is low, 0-100 cubic feet of gas per ton of coal. It should be noted that the hydrology for coal bed methane production within the Sand Wash geologic basin is unfavorable even though the gas resource is large overall (Scott, et al., 1995).

Environmental Consequences: None.

Mitigative Measures: The proposed casing and cementing programs appear to be adequate to protect and/or isolate all resources identified above with casing and cement behind pipe from TD to the surface. The Fort Union lower coal unit would be protected with casing and cement behind pipe (TOC approx. 3500').

Name of specialist and date: Jennifer Maiolo 12/10/08

PALEONTOLOGY

Affected Environment: The surface of the well pad in NWSE Sec. 24, T12N, R97W would be Cathedral Bluffs Tongue of the Wasatch Formation, overlain by Quaternary alluvium. The Cathedral Bluffs Tongue overlies and intertongues with Tipton Tongue sediments of the Green River formation. Vertebrate fossils found in the Cathedral Bluffs Tongue include *Notharctus* and *Hyracotherium*; both fossils are early Eocene perissodactyls. The upper contact of Cathedral Bluffs Tongue of the Wasatch Formation has been revised in Moffat Co, CO and adjoining WY on the east side of the Washakie basin of the Greater Green River basin. The Cathedral Bluffs Tongue underlies a 200-324 ft thick gray and green mudstone that is interbedded with brown oil-shale, gray-brown silty kerogenaceous shale, gray or tan sandstone and siltstone and gray shale Godiva Rim Member of Green River Formation.

Environmental Consequences: *PYFC: Class 3* – Class 3 – Moderate or Unknown. Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.

- Often marine in origin with sporadic known occurrences of vertebrate fossils.
- Vertebrate fossils and scientifically significant invertebrate or plant fossils known to occur intermittently; predictability known to be low.

(or)

- Poorly studied and/or poorly documented. Potential yield cannot be assigned without ground reconnaissance.

Class 3a – Moderate Potential. Units are known to contain vertebrate fossils or scientifically significant non-vertebrate fossils, but these occurrences are widely scattered. Common invertebrate or plant fossils may be found in the area, and opportunities may exist for hobby collecting. The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.

Class 3b – Unknown Potential. Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known. This may indicate the unit or area is poorly studied, and field surveys may uncover significant finds. The units in this Class may eventually be placed in another Class when sufficient survey and research is performed. The unknown potential of the units in this Class should be carefully considered when developing any mitigation or management actions.

(1) Management concern for paleontological resources is moderate; or cannot be determined from existing data.

(2) Surface-disturbing activities may require field assessment to determine appropriate course of action.

This classification includes a broad range of paleontological potential. It includes geologic units of unknown potential, as well as units of moderate or infrequent occurrence of significant fossils. Management considerations cover a broad range of options as well, and could include pre-disturbance surveys, monitoring, or avoidance. Surface-disturbing activities will require sufficient assessment to determine whether significant paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources. These units may contain areas that would be appropriate to designate as hobby collection areas due to the higher occurrence of common fossils and a lower concern about affecting significant paleontological resources.

Mitigative Measures: Unusual occurrences of plant and invertebrate fossils should be recorded, and representative examples may be collected by a BLM approved and qualified paleontologist, if appropriate. Concentrations of common plant or invertebrate fossils that may be suitable for public hobby collection areas should also be noted and reported to the Field Office paleontology program coordinator or paleontology program lead. Additional mitigation measures may be appropriate in some cases for these types of localities.

If vertebrate fossil material is discovered during construction activities, surface disturbing actions shall halt until an assessment of the find is completed and appropriate protection measures taken. The Authorized Officer should be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time, the concurrence of the Authorized Officer or official representative for a longer work stoppage must be obtained. Work may not resume until approval is granted from both the PI or Field Agent and the Authorized Officer.

Additionally:

Paleontology: During operations, if any vertebrate paleontological resources are discovered, in accordance with Section 6 of Form 3100-11 and 43 CFR 3162.1, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Little Snake Field Office of the BLM shall be notified within 48 hrs of the discovery, and a decision as to the preferred alternative/course of action will be rendered.

Name of specialist and date: Jennifer Maiolo 12/11/08

RANGE MANAGEMENT

Affected Environment: The proposed Ace Draw Federal Well #33-24 would be located in the Powder Wash Allotment. This allotment is permitted for cattle and sheep grazing from November through May.

Environmental Consequences: The proposed well and associated road construction would remove 9.1 acres of native vegetation. This loss of vegetation and associated disturbance from vehicle traffic, noise and human presence may cause the cattle to alter their distribution pattern. This may result in over utilization of the vegetative resources in other parts of the grazing allotment. Gates leading into the allotment could be left open by the drilling crew and other personnel, which could lead to possible livestock trespass situations. The presence of livestock may hinder reclamation efforts.

Mitigative Measures: Installation of a cattleguard at gate locations would prevent livestock from leaving the allotment through an open gate. Fencing of the well pad during reclamation efforts may help the establishment of native vegetation.

Name of specialist and date: Kathy McKinstry 11/16/08

SOILS

Affected Environment: The proposed well would be found within the Tresano sandy loam soil-mapping unit. Slopes within this unit average 3 to 12 percent. The soils are Eolian deposits derived from sandstone. Generally, these soils are well drained. The mean annual precipitation is 9 to 11 inches and the runoff class is medium.

Environmental Consequences: The construction and operation of the proposed well would affect soils within and immediately adjacent to the proposed area of disturbance. Increased soil erosion from wind and water would occur during construction of the well pad, and access roads. Erosion would continue throughout the operational life of the well. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur.

Vegetation and soil would be removed from approximately 9.1 acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation would reduce the potential to have excessive sediments and salts in runoff water from the well site.

Mitigative Measures: Additional mitigative measures would be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the access road and well pad.

Name of specialist and date: Shawn Wiser 12/03/08

UPLAND VEGETATION

Affected Environment: The proposed Ace Draw Federal Well #33-24 would be located in a Loamy 7-10" range site which typically supports potential native vegetation: Wyoming big sagebrush, shadscale saltbush, streambank wheatgrass, Indian ricegrass, Nevada bluegrass, needleandthread, streambank wheatgrass, and western wheatgrass. Species noted during the on-site included those listed above and additionally, black sage, whitesage (or winterfat), rabbitbrush and crested wheatgrass. The crested wheatgrass was probably planted on the nearby abandoned well site and access road and had spread from there. The vegetation exhibited good vigor and had not received detectable grazing use.

Environmental Consequences: The proposed well would completely remove the vegetation from 9.1 acres on federal surface. While this removal would be relatively minor in the larger landscape, it would be in addition to numerous other plant community intrusions such as the dense road network, other wells, and the Powder Wash Camp. As evidenced by the high levels of halogeton within the undisturbed plant community, any disturbance at these locations has the potential to greatly increase the presence of this poisonous, non-native species if required weed management practices are not followed. As required, the sites would be partially reclaimed if the well is a producer and completely reclaimed if the wells do not produce. Aridity, highly saline soils, and weed competition would result in very slow re-establishment of the native species that are reseeded. Careful adherence to required reclamation practices would be vital to ensuring that the direct impacts of the Proposed Action do not have long-term adverse impacts to the plant community.

Mitigative Measures: Adherence to the reclamation and stabilization measures as described in the Surface Use Plan and COAs.

Name of specialist and date: Kathy McKinstry 11/16/08

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area provides year round habitat for mule deer, elk and pronghorn antelope in all but the most severe winters. A variety of small mammals, song birds and reptiles may be found within the proposed project area.

Environmental Consequences: The construction of the access road, well pad, and pipeline and drilling activities would likely displace big game animals from the project area. Surrounding undisturbed habitats are sufficient to support displaced big game animals. It is likely that some displaced wildlife would return to the project area once drilling is completed.

Small mammals and reptiles that burrow could be entrapped and die as a result of construction activities associated with access road and well pad development. This would be a one-time impact on individual animals and would not likely affect any species populations. Construction activities may result in nest destruction or abandonment if conducted during the nesting season. This is not likely to impact any song bird populations.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny 12/02/08

OTHER NON-CRITICAL ELEMENTS:

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Forest Management	SW 12/01/08		
Hydrology/Ground		JAM 12/11/08	
Hydrology/Surface		SW 12/03/08	
Paleontology		JAM 12/11/08	
Range Management		KM 11/16/08	
Realty Authorizations		LM 01/26/09	
Recreation/Transportation		GMR 12/02/08	
Socio-Economics		LM 12/04/08	
Solid Minerals		JAM 12/01/08	
Visual Resources		GMR 12/02/08	
Wild Horse & Burro Mgmt	KM 11/16/08		
Wildlife, Aquatic	TN 12/08/08		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the Ace Draw Federal Well #33-24 when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the Powder Wash area. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well site, access road, and future pipeline routes, but should return once construction is completed. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The proposed project area provides healthy productive habitats for a variety of wildlife species. The development of the proposed well would not prevent this standard from being met in the future.

Name of specialist and date: Timothy Novotny 12/02/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: There are no threatened or endangered species or habitats for such species within the proposed project area. The proposed well is within greater sage-grouse winter habitat. As mitigated, the proposed project would not prevent this standard from being met in the future.

Name of specialist and date: Timothy Novotny 12/02/08

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would completely remove 9.1 acres of native vegetation. As long as the COAs concerning revegetation and weed control are faithfully adhered to, the native plant community would eventually return and weeds such as halogeton would be kept in check, and thus meet this standard. The No Action Alternative would meet this standard as no disturbance would occur.

Name of specialist and date: Kathy McKinstry 11/16/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed well. This standard does not apply.

Name of specialist and date: Hunter Seim 12/03/08

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian zones in the project area. This standard does not apply.

Name of specialist and date: Timothy Novotny 12/02/08

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the pipeline corridors would be completed immediately after installation to minimize sheet and rill erosion from the corridor. Interim reclamation of the unused area on the well pad would be completed to minimize sheet and rill erosion from the well site. When the well pad is no longer needed for production operations, the disturbed well pad and access road would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management Practices would help to reduce accelerated erosion of the sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Shawn Wiser 12/01/08

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, and it is not expected to while the well location, pipeline, and access road is used for operations. The well pad site, pipeline corridor, and access road would not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or are attached as mitigating measures that would reduce impacts to and conserve soil materials. Upland soil health would return to the well pad, pipeline corridor, and access road disturbances after reclamation practices and well abandonment has been successfully achieved.

Name of specialist and date: Shawn Wiser 12/01/08

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2008-111

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

DECISION AND RATIONALE:

I have determined that approving this APD is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. Right-of -Way Grants COC73549 and COC73550 will be issued to J-W Operating Company (See Attachment 1). The project will be monitored as stated in the Compliance Plan outlined below.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC70444, Well #33-24. ROW stipulations and maps for Grants COC73549 and COC73550 issued to J-W Operating Company are in the serialized case files.

COMPLIANCE PLAN(S):

Compliance Schedule

Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan

The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

Assignment of Responsibility

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Land Law Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: